MASTER INDEX

Volumes 171–180

AUTHOR INDEX

Abdullaev, F.Kh., Dynamical chaos of solitons and nonlinear periodic waves 179 (1989) 1
Ahrens, T.J., *see* B. Svendsen 180 (1989) 333
Akaishi, Y., *see* I. Šlaus 173 (1989) 257
Akhromeyeva, T.S., S.P. Kurdyumov, G.G. Malinetskii and A.A. Samarskii, Nonstationary dissipative structures and diffusion-induced chaos in nonlinear media 176 (1989) 189
Akutsu, Y., *see* M. Wadati 180 (1989) 247
Au, C.-K., *see* G. Feinberg 180 (1989) 83

Baer, M., Integral equation approach to atom–diatom exchange processes 178 (1989) 99
Bartschat, K., Excitation and ionization of atoms by interaction with electrons, positrons, protons and photons 180 (1989) 1
Barut, A.O. and I.H. Duru, Path integral formulation of quantum electrodynamics from classical particle trajectories 172 (1989) 1
Bass, J.D., *see* B. Svendsen 180 (1989) 333
Beckmann, P., Spectral densities and nuclear spin relaxation in solids 171 (1988) 85
Bohm, D. and B.J. Hiley, Non-locality and locality in the stochastic interpretation of quantum mechanics 172 (1989) 93
Bountis, T., *see* A. Ramani 180 (1989) 159
Bourrely, C., J. Soffer, F.M. Renard and P. Taxil, Spin effects at supercollider energies 177 (1989) 319
Byron Jr.., F.W. and C.J. Joachain, Theory of (e, 2e) reactions 179 (1989) 211

Chechetkin, V.R. and A.S. Sigov, Stability of superconducting magnet systems subject to thermal disturbances 176 (1989) 1

Davies, G., The optical properties of luminescence centres in silicon 176 (1989) 83
Deguchi, T., *see* M. Wadati 180 (1989) 247
Duru, I.H., *see* A.O. Barut 172 (1989) 1

Eliezer, S. and H. Hora, Double layers in laser-produced plasmas 172 (1989) 339

Feinberg, G., J. Sucher and C.-K. Au, The dispersion theory of dispersion forces 180 (1989) 83
Flower, D.R., Molecular collision processes in interstellar clouds 174 (1989) 1
Franzini, P.J., $B\overline{B}$ mixing: a review of recent progress 173 (1989) 1
Fushchich, W.I. and R.Z. Zhdanov, Symmetry and exact solutions of nonlinear spinor equations 172 (1989) 123

Gonchar, N.S., Correlation functions of some continuous model systems and description of phase transitions 172 (1989) 175
Grammaticos, B., *see* A. Ramani 180 (1989) 159

Hayashi, A., *see* B. Schwesinger 173 (1989) 173
Hiley, B.J., *see* D. Bohm 172 (1989) 93
Holzwarth, G., *see* B. Schwesinger 173 (1989) 173
Hora, H., *see* S. Eliezer 172 (1989) 339

Joachain, C.J., *see* F.W. Byron Jr. 179 (1989) 211

Kim, D.J., The electron–phonon interaction and itinerant electron magnetism 171 (1988) 129
Klimontovich, Yu.L., H. Wilhelmsson, I.P. Yakimenko and A.G. Zagorodny, Statistical theory of plasma–molecular systems 175 (1989) 263
Köpke, L. and N. Wermes, J/ψ decays 174 (1989) 67
Kurdyumov, S.P., *see* T.S. Akhromeyeva 176 (1989) 189

Lerche, W., A.N. Schellekens and N.P. Warner, Lattices and strings 177 (1989) 1
Liedenbaum, C., S. Stolte and J. Reuss, Inversion produced and reversed by adiabatic passage 178 (1989) 1
Lipparini, E. and S. Stringari, Sum rules and giant resonances in nuclei 175 (1989) 103

Maini, P.K., *see* J.D. Murray 171 (1988) 59
Malinetskii, G.G., *see* T.S. Akhromeyeva 176 (1989) 189
Mathiot, J.-F., Electromagnetic meson-exchange currents at the nucleon mass scale 173 (1989) 63
Mättig, P., The structure of jets in e^+e^- collisions 177 (1989) 141
Murray, J.D., P.K. Maini and R.T. Tranquillo, Mechanochemical models for generating biological pattern and form in development 171 (1988) 59

Paschos, E.A. and U. Türke, Quark mixing and *CP* violation 178 (1989) 145
Perelomov, A.M., Supersymmetric chiral models: geometrical aspects 174 (1989) 229

Raadu, M.A., The physics of double layers and their role in astrophysics 178 (1989) 25
Ramani, A., B. Grammaticos and T. Bountis, The Painlevé property and singularity analysis of integrable and non-integrable systems 180 (1989) 159
Renard, F.M., *see* C. Bourrely 177 (1989) 319
Restuccia, A. and J.G. Taylor, Light-cone gauge analysis of superstrings 174 (1989) 283
Reuss, J., *see* C. Liedenbaum 178 (1989) 1
Robinson, T.R., The heating of the high latitude ionosphere by high power radio waves 179 (1989) 79

Salvini, G. and A. Silverman, Physics with matter–antimatter colliders 171 (1988) 231
Samarskii, A.A., *see* T.S. Akhromeyeva 176 (1989) 189
Schellekens, A.N., *see* W. Lerche 177 (1989) 1
Schmitz, R., Fluctuations in nonequilibrium fluids 171 (1988) 1
Schouten, J.A., Phase equilibria in binary systems at very high pressures 172 (1989) 33
Schwesinger, B., H. Weigel, G. Holzwarth and A. Hayashi, The Skyrme soliton in pion, vector- and scalar-meson fields: πN-scattering and photoproduction 173 (1989) 173
Sher, M., Electroweak Higgs potentials and vacuum stability 179 (1989) 273
Sigov, A.S., *see* V.R. Chechetkin 176 (1989) 1
Silverman, A., *see* G. Salvini 171 (1988) 231
Šlaus, I., Y. Akaishi and H. Tanaka, Neutron–neutron effective range parameters 173 (1989) 257
Soffer, J., *see* C. Bourrely 177 (1989) 319
Stolte, S., *see* C. Liedenbaum 178 (1989) 1
Stringari, S., *see* E. Lipparini 175 (1989) 103
Sucher, J., *see* G. Feinberg 180 (1989) 83
Svendsen, B., J.D. Bass and T.J. Ahrens, Optical radiation from shock-compressed materials and interfaces 180 (1989) 333

Takeno, S., *see* F. Yoshida 173 (1989) 301
Tanaka, H., *see* I. Šlaus 173 (1989) 257
Taxil, P., *see* C. Bourrely 177 (1989) 319
Taylor, J.G., *see* A. Restuccia 174 (1989) 283
Thorn, C.B., String field theory 175 (1989) 1
Tranquillo, R.T., *see* J.D. Murray 171 (1988) 59
Tsytovich, V.N., Radiative-resonant collective wave–particle interactions 178 (1989) 261
Türke, U., *see* E.A. Paschos 178 (1989) 145

Wadati, M., T. Deguchi and Y. Akutsu, Exactly solvable models and knot theory 180 (1989) 247
Warner, N.P., *see* W. Lerche 177 (1989) 1
Weigel, H., *see* B. Schwesinger 173 (1989) 173
Wermes, N., *see* L. Köpke 174 (1989) 67
Wilhelmsson, H., *see* Yu.L. Klimontovich 175 (1989) 263

Yakimenko, I.P., *see* Yu.L. Klimontovich 175 (1989) 263
Yoshida, F. and S. Takeno, Dynamical correlations and collective excitations in liquids 173 (1989) 301

Zagorodny, A.G., *see* Yu.L. Klimontovich 175 (1989) 263
Zhdanov, R.Z., *see* W.I. Fushchich 172 (1989) 123

SUBJECT INDEX

General

Fluctuations in nonequilibrium fluids, R. Schmitz 171 (1988) 1
Path integral formulation of quantum electrodynamics from classical particle trajectories, A.O. Barut and I.H. Duru 172 (1989) 1
Non-locality and locality in the stochastic interpretation of quantum mechanics, D. Bohm and B.J. Hiley 172 (1989) 93
Symmetry and exact solutions of nonlinear spinor equations, W.I. Fushchich and R.Z. Zhdanov 172 (1989) 123
Correlation functions of some continuous model systems and description of phase transitions, N.S. Gonchar 172 (1989) 175
Nonstationary dissipative structures and diffusion-induced chaos in nonlinear media, T.S. Akhromeyeva, S.P. Kurdyumov, G.G. Malinetskii and A.A. Samarskii 176 (1989) 189
Dynamical chaos of solitons and nonlinear periodic waves, F.Kh. Abdullaev 179 (1989) 1
The Painlevé property and singularity analysis of integrable and non-integrable systems, A. Ramani, B. Grammaticos and T. Bountis 180 (1989) 159
Exactly solvable models and knot theory, M. Wadati, T. Deguchi and Y. Akutsu 180 (1989) 247

The physics of elementary particles and fields

Physics with matter–antimatter colliders, G. Salvini and A. Silverman 171 (1988) 231
$B\bar{B}$ mixing: a review of recent progress, P.J. Franzini 173 (1989) 1
The Skyrme soliton in pion, vector- and scalar-meson fields: πN-scattering and photoproduction, B. Schwesinger, H. Weigel, G. Holzwarth and A. Hayashi 173 (1989) 173
J/ψ decays, L. Köpke and N. Wermes 174 (1989) 67
Supersymmetric chiral models: geometrical aspects, A.M. Perelomov 174 (1989) 229
Light-cone gauge analysis of superstrings, A. Restuccia and J.G. Taylor 174 (1989) 283
String field theory, C.B. Thorn 175 (1989) 1
Lattices and strings, W. Lerche, A.N. Schellekens and N.P. Warner 177 (1989) 1
The structure of jets in e^+e^- collisions, P. Mättig 177 (1989) 141
Spin effects at supercollider energies, C. Bourrely, J. Soffer, F.M. Renard and P. Taxil 177 (1989) 319
Quark mixing and *CP* violation, E.A. Paschos and U. Türke 178 (1989) 145
Electroweak Higgs potentials and vacuum stability, M. Sher 179 (1989) 273

Nuclear physics

Electromagnetic meson-exchange currents at the nucleon mass scale, J.-F. Mathiot 173 (1989) 63
The Skyrme soliton in pion, vector- and scalar-meson fields: πN-scattering and photoproduction, B. Schwesinger, H. Weigel, G. Holzwarth and A. Hayashi 173 (1989) 173
Neutron–neutron effective range parameters, I. Šlaus, Y. Akaishi and H. Tanaka 173 (1989) 257
Sum rules and giant resonances in nuclei, E. Lipparini and S. Stringari 175 (1989) 103

Atomic and molecular physics

Molecular collision processes in interstellar clouds, D.R. Flower 174 (1989) 1
Statistical theory of plasma–molecular systems, Yu.L. Klimontovich, H. Wilhelmsson, I.P. Yakimenko and A.G. Zagorodny 175 (1989) 263
Inversion produced and reversed by adiabatic passage, C. Liedenbaum, S. Stolte and J. Reuss 178 (1989) 1
Integral equation approach to atom–diatom exchange processes, M. Baer 178 (1989) 99
Theory of (e, 2e) reactions, F.W. Byron Jr. and C.J. Joachain 179 (1989) 211
Excitation and ionization of atoms by interaction with electrons, positrons, protons and photons, K. Bartschat 180 (1989) 1
The dispersion theory of dispersion forces, G. Feinberg, J. Sucher and C.-K. Au 180 (1989) 83

Classical areas of phenomenology (including applications)

Inversion produced and reversed by adiabatic passage, C. Liedenbaum, S. Stolte and J. Reuss 178 (1989) 1

Fluids, plasmas and electric discharges

Fluctuations in nonequilibrium fluids, R. Schmitz 171 (1988) 1
Phase equilibria in binary systems at very high pressures, J.A. Schouten 172 (1989) 33
Double layers in laser-produced plasmas, S. Eliezer and H. Hora 172 (1989) 339
Statistical theory of plasma–molecular systems, Yu.L. Klimontovich, H. Wilhelmsson, I.P. Yakimenko and A.G. Zagorodny 175 (1989) 263
The physics of double layers and their role in astrophysics, M.A. Raadu 178 (1989) 25
Radiative-resonant collective wave–particle interactions, V.N. Tsytovich 178 (1989) 261
The heating of the high latitude ionosphere by high power radio waves, T.R. Robinson 179 (1989) 79

Condensed matter: structure, thermal and mechanical properties

The electron–phonon interaction and itinerant electron magnetism, D.J. Kim 171 (1988) 129
Phase equilibria in binary systems at very high pressures, J.A. Schouten 172 (1989) 33
Dynamical correlations and collective excitations in liquids, F. Yoshida and S. Takeno 173 (1989) 301
Optical radiation from shock-compressed materials and interfaces, B. Svendsen, J.D. Bass and T.J. Ahrens 180 (1989) 333

Condensed matter: electronic structure, electrical, magnetic and optical properties

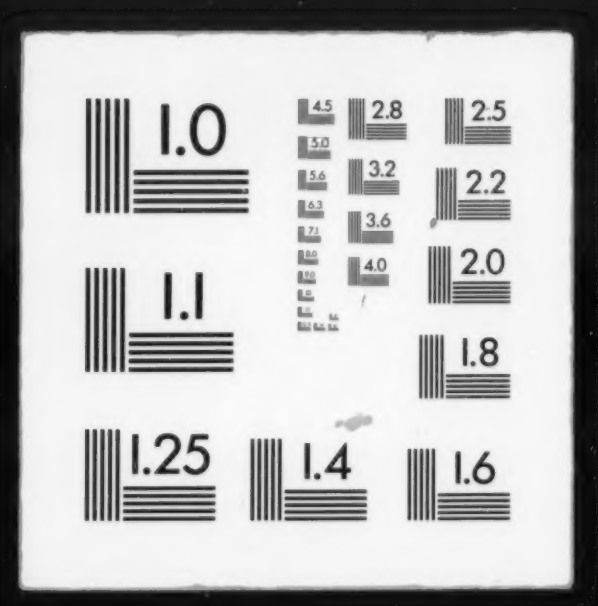
Spectral densities and nuclear spin relaxation in solids, P. Beckmann 171 (1988) 85
The electron–phonon interaction and itinerant electron magnetism, D.J. Kim 171 (1988) 129
Stability of superconducting magnet systems subject to thermal disturbances, V.R. Chechetkin and A.S. Sigov 176 (1989) 1
The optical properties of luminescence centres in silicon, G. Davies 176 (1989) 83
Optical radiation from shock-compressed materials and interfaces, B. Svendsen, J.D. Bass and T.J. Ahrens 180 (1989) 333

Cross-disciplinary physics and related areas of science and technology

Mechanochemical models for generating biological pattern and form in development, J.D. Murray, P.K. Maini and R.T. Tranquillo 171 (1988) 59

Geophysics, astronomy and astrophysics

Molecular collision processes in interstellar clouds, D.R. Flower 174 (1989) 1
The physics of double layers and their role in astrophysics, M.A. Raadu 178 (1989) 25
Radiative-resonant collective wave–particle interactions, V.N. Tsytovich 178 (1989) 261
The heating of the high latitude ionosphere by high power radio waves, T.R. Robinson 179 (1989) 79


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3
7.1